STATE OF CALIFORNIA

Energy Resources Conservation
And Development Commission

In the Matter of:	)	Docket No. 01-AFC-4
	)	
Application for Certification for	)	
the East Altamont Energy Center	)	
	)	

Energy Commission Staff's Brief on Cumulative Air Quality Analysis

I. INTRODUCTION

On March 29, 2001, East Altamont Energy Center, LLC (applicant), a wholly owned subsidiary of Calpine Corporation, filed an application for certification (AFC) for a nominal 1,100 megawatt power plant called the East Altamont Energy Center (EAEC). On June 27, 2001, the AFC was accepted as complete. On November 13, 2001, the Committee conducted a Scheduling Conference where it requested further clarification on the requirements of a cumulative impacts analysis for air quality under the California Environmental Quality Act (CEQA). This brief is intended to provide further clarification on the necessary components of a cumulative impacts analysis for air quality and show that the new community of Mountain House must be included in such an analysis.

II. FACTUAL OVERVIEW

The EAEC is proposed to be sited at the northeastern edge of Alameda County, approximately one mile northwest of the newly approved town of Mountain House. At full development, Mountain House will contain 44,000 people and 21,000 jobs and encompass 4,784 acres (7.5 square miles). It would include 16,000 dwelling units and 12.5 million square feet of industrial, office, and retail space. The development has an

approved master plan for the entire development, a specific plan for phase 1 of the development, and zoning for the first 1,348 acres. Construction has already commenced for the first phase of development.

III. CEQA REQUIRES A CUMULATIVE IMPACTS ANALYSIS

CEQA provides that a proposed project may have a significant effect on the environment when the possible effects on the environment are individually limited but "cumulatively considerable." (Pub. Resources Code, §21083(b); Cal. Code Regs., tit. 14, §15065.) "'Cumulatively considerable' means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." (Cal. Code Regs., tit. 14, §15065,emphasis added.) In addition to analyzing the direct impacts of a project, staff determines whether or not a project will result in a significant cumulative impact.

The analysis must include other past, present and probable future projects causing related cumulative impacts regardless of whether such projects are within the control of the lead agency. (Cal. Code Regs., tit. 14, §15130, subds. (a)(1) & (b)(1).) The focus is on other projects "causing related impacts", not necessarily on projects identical to that proposed. For the EAEC analysis staff has identified several current and probable future projects that may cause impacts related, or similar, to the EAEC. These projects include the proposed Tesla Power Project, the proposed Tracy Peaker Project, and the new town of Mountain House.

Mountain House is not a powerplant. The guidelines, however, do not state that the cumulative impacts analysis must include only those projects that are similar in design to the proposed project. The focus is on the similarity of effect. Mountain House will produce similar air quality impacts as the EAEC, and thus must be included in the air quality cumulative impacts analysis to afford the Committee an accurate perspective of project impacts on which to base a decision.

California courts have repeatedly emphasized that the rationale for the cumulative impact analysis is to provide the decisionmaker a broad perspective on the overall impact of a project. (See *Bozung v. Local Agency Formation Com.* (1975) 13 Cal.3d 263; *Citizens Association v. County of Inyo* (1985) 172 Cal.App.3d 151.) In *Bozung*, the State Supreme Court termed the CEQA cumulative impact requirement a "vital provision" which "directs reference to projects, existent and planned, in the region so that the cumulative impact of all projects in the region can be assessed." (*Bozung v. Local Agency Formation Com.*, supra, 13 Cal.3d 263, 283, emphasis added.) If Mountain House were excluded from the cumulative impacts analysis, the Committee would not be able to see the full effect of the project on the air quality in the area. This goes against one of the basic tenets of CEQA, full disclosure of environmental impacts.

As noted by the courts, "a cumulative impact analysis which understates information concerning the severity and significance of cumulative impacts impedes meaningful public discussion and skews the decisionmaker's perspective concerning the environmental consequences of a project, the necessity for mitigation measures, and the appropriateness of project approval." (*Citizens to Preserve the Ojai v. County of* Ventura (1985) 176 Cal.App.3d 421, 431) By excluding Mountain House, staff's analysis would understate the significance of cumulative impacts, thereby rendering the analysis incomplete and jeopardizing any decision based upon the analysis.

IV. MOUNTAIN HOUSE IS SIMILAR IN IMPACT TO THE PROPOSED PROJECT AND WITHIN THE AREA OF POTENTIAL EFFECT AND THUS MUST BE INCLUDED IN A CUMULATIVE IMPACTS ANALYSIS OF THE PROPOSED PROJECT.

A. The EAEC Would Emit PM-10 and Ozone Precursors.

According to the AFC, the proposed project is estimated to emit a maximum of 261.8 tons of nitrogen oxides (NOx), 73.7 tons of volatile organic chemicals (VOCs), and 211.2 tons of particulate matter less than 10 microns in diameter (PM-10) per year, at full capacity. (EAEC AFC p. 8.1-27.)

B. Mountain House Would Emit PM-10 and Ozone Precursors.

San Joaquin County analyzed the environmental impacts of the Mountain House Master Plan, which describes the general plan for the entire development, and Specific Plan I, which describes the first phase of development in detail. According to the final environmental impact report (FEIR) published by the County in 1994, Mountain House would also result in the emission of VOCs, NOx, and PM-10.

These criteria pollutants would be emitted during construction of the community and through residential uses and additional vehicle trips due to the development. The County found that construction activities could result in the exceedance of the PM-10 threshold of significance[1] and would affect local and regional air quality over the 25-year build-out period. The County estimated that construction activities could result in the release of .8 ton per day of PM-10, which could add up to 7,736 tons over the build-out period. (FEIR p.4.13-8.) The County also found that Mountain House would cause the emission of ozone precursors through increased vehicle trips, residential uses, and industrial uses. (FEIR p. 4.13-2.) The County estimated that by 2010, Mountain House could emit up to 157.6 tons of PM-10, 1,471 tons of NOx, and 1,018 tons of VOC per year from vehicle and residential sources alone. (FEIR p. 4.13-3.) Therefore, the County found that the project would result in "substantial new regional emissions." (FEIR p. 4.13-4.)

The County made the following finding in regard to both the master and specific plans:

> The project would increase regional emissions of criteria pollutants through new vehicle travel and area-source emissions associated with residential and industrial uses in excess of threshold levels established by the San Joaquin Valley Unified Air Pollution Control District. These emissions would add to the regional emission burdens within the San Joaquin Air Basin and the adjacent San Francisco Bay Air Basin, and delay eventual attainment of air quality standards for ozone and suspended particulate matter (PM-10).

[1] San Joaquin County used the threshold of 80 pounds per day for PM-10 emissions, the exceedance of which would constitute a significant impact. (FEIR 4.13-2)

(FEIR pp. 4.13-2, 4.13-9.) The County also found that mitigation measures would not reduce the air quality impacts of the project in the Livermore and San Joaquin valleys to a level of insignificance. (FEIR p. 4.13-4.) The County concluded that the impact would be unavoidable and adverse. (FEIR p. 4.13-4.)

The County, thus, found the new town of Mountain House would be a significant source of criteria pollutants. The Energy Commission may not ignore this source in conducting an air quality cumulative impacts analysis for the EAEC, which is only one mile away.

In the cumulative impacts analysis of the EIR, the county specifically found that Mountain House would "contribute to a forecasted substantial increase in county-wide regional pollutants" and that this would contribute to the failure to attain air quality standards in the San Joaquin Valley air basin for ozone, carbon monoxide, and PM-10. (FEIR p. 6-9.) Given the proximity of the EAEC to Mountain House and the emissions expected from both projects, a cumulative impacts analysis of the EAEC must include Mountain House.

C. The Area Surrounding Both Projects is in Non-attainment for PM-10 and Ozone.

The EAEC is proposed to be located in the San Joaquin Valley, within the Bay Area Air Basin, which is regulated by the Bay Area Air Quality Management District. The project would also be on the cusp of the San Joaquin Valley Air Basin, which is regulated by the San Joaquin Valley Unified Air Pollution Control District. Both basins are classified as non-attainment areas for ozone. (EAEC AFC p. 8.1-6.) The San Joaquin Valley non-attainment area was recently downgraded to severe non-attainment for ozone, which means that the area is not making sufficient progress towards attaining the ozone standards, and more drastic measures must be taken. (66 Fed. Reg. 56,476 (2001).) Ozone is not emitted directly into the air, but is formed through the photochemical reaction of NOx and VOCs. NOx is primarily generated from the combustion of fossil fuels. (EAEC AFC p. 8.1-7.)

Also of concern in the area surrounding the proposed project is PM-10. The San Joaquin Valley Air Basin is in non-attainment of both federal and state standards for PM-10. (EAEC AFC p. 8.1-9.) The Bay Area Air Basin is in non-attainment of the state standards. (*ibid.*) Combustion sources, including vehicles and powerplants, emit PM-10.

The area is having trouble attaining ozone and PM-10 standards in part due to geography. The area suffers from persistent temperature inversion and contains mountain ranges that trap the air mass, inhibiting dispersion. (EAEC AFC p. 8.1-9.) Pollutants emitted in the area are less likely to disperse and, thus, contribute to a potentially significant cumulative impact. A cumulative impacts analysis of pollution sources in the area of the project would provide important information regarding the significance of the proposed project's contribution to the area's problems involving ozone and PM-10. Both the EAEC and Mountain House are located within this area and may contribute to problems in the region. The non-attainment status evinces the seriousness of the problem and shows that a comprehensive cumulative impacts analysis is needed.

D. Mountain House is Within the Area of Potential Effect

In analyzing air quality cumulative impacts, staff generally includes projects located within a 6-mile radius of the proposed project. If significant projects lie just outside this radius, staff generally includes those as well. Mountain House clearly lies well within this radius, at about a mile southeast of the EAEC. The Tesla Power Project lies approximately 4 miles from the EAEC. The Tracy Peaker Project lies just outside this radius, a little over 6 miles from the project. However, considering that it is a proposed 169 MW facility with potential air quality implications, it must be included to afford a full disclosure of potential impacts.

V. THE FULL BUILD-OUT OF MOUNTAIN HOUSE IS SUFFICIENTLY FORESEEABLE FOR A CUMULATIVE IMPACTS ANALYSIS

At the Status Conference, applicant inferred that staff was being inconsistent by refusing to rely on the full build-out of Mountain House for its Soil and Water Resources analysis, and yet requiring the air quality cumulative impacts analysis to assume the full build-out of the community. This approach evinces not inconsistency, but adherence to CEQA. CEQA differentiates a cumulative impacts analysis from an analysis of direct impacts, requiring a cumulative impacts analysis to include reasonably foreseeable probable future projects. (Cal. Code Regs., tit. 14, §15355(b).) The applicant fails to realize that in one area, soil and water resources, staff is discussing potential direct impacts and in another area, air quality, staff is discussing potential cumulative impacts.

The Soil and Water Resources analysis involves a determination of whether water will be available for the project, and what the potential impacts of using that water will be. The applicant relies on the full build-out of Mountain House, including development of a recycled-water source, in its estimation of the proportion of raw water and recycled water the project will use. Mountain House, however, does not yet have the necessary permits to build past phase one. There is the potential that Mountain House will not get these permits and therefore will not be able to build past this initial phase. This would mean that the recycled water assumed by EAEC in the AFC would not be available, and the project would have to use some other source of water, which could lead to other impacts. Considering the downturn in the economy and other market forces outside the control of both the Mountain House developer and the applicant, there is a reasonable possibility that construction will stop at phase one and that recycled water from Mountain House will not be available to the project within the timeframe needed. Staff is, therefore, factoring this contingency into its analysis in order to ensure that all of the potential environmental impacts from the project are taken into consideration and analyzed.

The Air Quality analysis, on the other hand, involves a determination not of availability of supply, but of what impacts the project's emissions will have on the environment together with other present and reasonably foreseeable sources. In this case, there is the

potential that Mountain House will get built in its entirety and will, therefore, emit the maximum projected pollutants. The developers of Mountain House currently intend to develop according to schedule and do not anticipate any curtailment of their plans. Market forces and permitting issues may dictate otherwise, but the intent is for full build-out according to plan. Phase one of the development is currently under construction and should, therefore, be considered a "current" project. The rest of the phases do not have the same certainty, but are nonetheless reasonably foreseeable. CEQA specifically requires a cumulative impacts analysis to include all reasonably foreseeable probable future projects. (Cal. Code Regs., tit 14, §15355(b).) Given that there is already a general plan for the full development of Mountain House, the town is a probable future project and therefore must be included in an analysis of potential cumulative impacts.

Any uncertainty surrounding the full build-out of Mountain House does relieve the lead agency from including such impacts in its analysis. (*Terminal Plaza Corporation v. City and County of San Francisco* (1986) 177 Cal. App.3d 892.) What matters is whether the potential future projects appear foreseeable at the time of EIR preparation. *(City of Antioch v. City Council* (1986) 187 Cal. App.3d 1325.) As noted above, Mountain House is foreseeable and thus must be included in the analysis.

VI. STAFF HAS APPLIED THIS PROTOCOL TO OTHER PROJECTS

Staff has required previous applicants to include in a cumulative impact model sources other than stationary power plant facilities. In the Metcalf Energy Center (MEC), also a Calpine project, staff required the applicant to model the full build-out of the Coyote Valley Research Park (CVRP), which involved the potential addition of 20,000 employees, and the proposed Coyote Urban Reserve Development (CURD), which involved the potential development of 25,000 dwellings on 170 acres. (MEC Final Staff Assessment p.44.) The applicant modeled the proposed project, emissions from on-site vehicles and stationary sources at CVRP, mobile emissions from CURD, and emissions from vehicles using the nearby highway. The pollutants modeled included nitrogen dioxide (NO2) and PM-10; the same pollutants at issue here.

Staff has also looked at proposed residential and business developments in the Three Mountain, High Desert and Potrero licensing cases. Staff is not asking the applicant to model anything different in this case. Indeed, here there is a stronger case for requiring the inclusion of Mountain House because the town has actually commenced construction, whereas CVRP and CURD were only proposals at the time of the MEC analysis.

VII. IT IS FEASIBLE TO INCLUDE MOUNTAIN HOUSE IN THE MODELING AND DOING SO WILL NOT AFFECT THE SCHEDULE

In every case staff asks the applicant to model cumulative air impacts. In this case, in order to save time and money, the applicant wishes to use the Tesla cumulative impact model, which has already been completed, and staff has no objection to this in concept. Mountain House can be incorporated into this model. The FEIR for Mountain House included estimates of that project's potential to emit. Data was provided for pounds per day for the key criteria pollutants VOC, NOx, PM-10 and sulfur oxides (SOx). Such data should be sufficient to incorporate into the already completed cumulative impact analysis for Tesla. The applicant had experience in MEC incorporating residential and non-stationary source emissions into a cumulative impacts assessment. Doing the same here should not be an undue burden.

Fully incorporating Mountain House into the model should take at most 1-1 1/2 months. If started soon, this would not affect the project schedule. Staff is still waiting for the PDOC. Once issued, the PDOC is subject to a 30-day comment review period before issuance of the FDOC. Staff will not issue its FSA prior to receipt of the FDOC. In this interim period there is sufficient time for the applicant to incorporate Mountain House into the cumulative impacts model and provide the results to staff.

VIII. CONCLUSION

CEQA requires a cumulative impacts analysis to include the effects of current projects and probable future projects. Phase one of Mountain House is a current project and the full build-out is a probable future project. Without the inclusion of Mountain House in

the cumulative impacts analysis, the Commission will not have sufficient information on the consequences to air quality of approving the project.

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Respectfully submitted,

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